



**- WELCOME -
KATHLEEN MCCARTHY**



We are pleased to announce that Kathleen McCarthy, MS, has joined the Public Health & Safety Division as the Chief of the Communicable Disease Prevention & Control Bureau. Kathy comes to us with more than 25 years of experience in communicable disease control, particularly laboratory services, and extensive management experience. She holds a bachelor's and master's degree in laboratory sciences and has worked in hospital, university and Indian Health Services settings. She most recently served as director of the laboratory at St. Peter's Community Hospital.

**MOTNANA
"FLU" UPDATE:**

This has been another confounding year for influenza vaccine distribution and for vaccine providers. Currently, we seem to have a sufficient supply of influenza vaccine in the state, but it did get to us quite late this year. Our traditional time to start the flu clinics was always October. This year October came and went, and very few doses had been distributed in Montana. The public complained, the physicians were unhappy, public health nurses began sending "worry-grams" to us at the state wondering if we knew anything. (We didn't!)



Once again, we are fortunate that the influenza viral disease has not made a huge impact on the state yet. We have had reports of sporadic cases in several of the counties. That has given us the opportunity to take advantage of some of the late season offers for both the injectable flu vaccine and the live FluMist vaccine by MedImmune. If we do see a peak for influenza disease, we may see it in late January, February or March. By then we will have had the opportunity to get these late doses out to you.

The offer of FluMist, which was late getting to you due to contract problems at CDC, was an opportunity for many of you to introduce this vaccine to healthy people in your communities aged 5 years to 49 years of age. This may be a good alternative for many groups of health care providers, schools, etc. in the future.

We just received notice that we can order some additional doses of the Sanofi Pasteur flu vaccine in vials, so we can offer this to the providers that have been seeing 3-year old children. Those three year olds were too old for the pediatric syringes (for children 6 months to 35 months of age) and too young for the Chiron vaccine (licensed for ages 4 and above). This supply will be from the CDC stockpile of vaccine, and available early in January of 2006. Stay tuned for ordering information.

Thank you for not closing down your clinics in frustration early this season. As usual, you have remained flexible and rolled with the changes that seem to be the norm now for our flu campaigns. You continue to provide the very best services in your communities to protect the public's health.

Do we have a prediction for next year? No, but we do know it won't be boring!!

**It's not too late to
vaccinate!**



What Is an Influenza Pandemic?

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide.

Historically, the 20th century saw three pandemics of influenza:

- ✓ **1918 influenza pandemic** caused at least 500,000 U.S. deaths and up to 40 million deaths worldwide
- ✓ **1957 influenza pandemic** caused at least 70,000 U.S. deaths and 1-2 million deaths worldwide
- ✓ **1968 influenza pandemic** caused about 34,000 U.S. deaths and 700,000 deaths worldwide

Characteristics and challenges of a pandemic:

1. Rapid Worldwide Spread

- ✓ When a pandemic influenza virus emerges, its global spread is considered inevitable.
- ✓ Preparedness activities should assume that the entire world population would be susceptible.
- ✓ Countries might, through measures such as border closures and travel restrictions, delay arrival of the virus, but cannot stop it.

2. Health Care Systems Overloaded

- ✓ Most people have little or no immunity to a pandemic virus. Infection and illness rates soar. A substantial percentage of the world's population will require some form of medical care.
- ✓ Nations unlikely to have the staff, facilities, equipment and hospital beds needed to cope with large numbers of people who suddenly fall ill.
- ✓ Inadequate supplies antiviral drugs, the two most important medical

interventions for reducing illness and deaths, are of particular concern.

- ✓ Death rates are high, largely determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations and the effectiveness of preventive measures.
- ✓ Past pandemics have spread globally in two and sometimes three waves.

3. Medical Supplies Inadequate

- ✓ The need for vaccine is likely to outstrip supply.
- ✓ The need for antiviral drugs is also likely to be inadequate early in a pandemic.
- ✓ A pandemic can create a shortage of hospital beds, ventilators and other supplies. Surge capacity at non-traditional sites such as schools may be created to cope with demand
- ✓ Difficult decisions will need to be made regarding who gets antiviral drugs and vaccines.

4. Economic and Social Disruption

- ✓ Travel bans, closings of schools and businesses and cancellations of events could have major impact on communities and citizens.
- ✓ Care for sick family members and fear of exposure can result in significant worker absenteeism.

Communications and Information are Critical Components of Pandemic Response

Education and outreach are critical to preparing for a pandemic. Understanding what a pandemic is, what needs to be done at all levels to prepare for pandemic influenza, and what could happen during a pandemic helps us make informed decisions both as individuals and as a nation. Should a pandemic occur the public must be able to depend on its government to provide scientifically sound public health information quickly, openly and dependably. For additional information on pandemic influenza visit: www.pandemicflu.gov.

Flu Information

How Does Seasonal Flu Differ From Pandemic Flu?

Seasonal Flu

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Outbreaks follow predictable seasonal patterns; occurs annually, usually in winter, in temperate climates

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Usually some immunity built up from previous exposure

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Healthy adults usually not at risk for serious complications; the very young, the elderly and those with certain underlying health conditions at increased risk for serious complications

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Health systems can usually meet public and patient needs

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Vaccine developed based on known flu strains and available for annual flu season

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Adequate supplies of antivirals are usually available

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Average U.S. deaths approximately 36,000/yr

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Symptoms: fever, cough, runny nose, muscle pain. Deaths often caused by complications, such as pneumonia.

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Generally causes modest impact on society (e.g., some school closing, encouragement of people who are sick to stay home)

Manageable impact on domestic and world economy. For additional information on seasonal flu visit: <http://www.hhs.gov/flu/>.

"U.S. to Test Boosting Bird-Flu Vaccine" Associated Press 11/09/05)

Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, told a Senate panel Wednesday that researchers will soon begin investigating whether they can extend the supply of an experimental bird flu vaccine by combining it with an immune-system booster. Researchers hope to boost the

Pandemic Flu

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Occurs rarely (three times in 20th century - last in 1968)

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Previous exposure; little or no pre-existing immunity

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Healthy people may be at increased risk for serious complications

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Health systems may be overwhelmed

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Vaccine probably would not be available in the early stages of a pandemic * *

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antivirals may be in limited supply

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Number of deaths could be quite high (e.g., U.S. 1918 death toll approximately 500,000)

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Symptoms may be more severe and complications more frequent

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cause major impact on society (e.g. widespread restrictions on travel, closings of schools and businesses, economy).

For additional information on pandemic flu visit: <http://www.pandemicflu.gov>.

number of experimental avian flu vaccine doses, to help prepare for a potential avian flu pandemic. Sanofi-Aventis and Chiron both have contracts with the United States to produce flu vaccines against the H5N1 strain of avian influenza, which has killed more than 63 people in Asia since 2003, and the U.S. government hopes to stockpile enough vaccines to immediately provide them to 20 million people in the event of a flu pandemic.

The Centers for Disease Control and Prevention's (CDC) Immunization Works Monthly

Update - *is provided to national health care provider and consumer groups for distribution to their members and constituencies. The immunization information provided is non-proprietary and is encouraged to be widely disseminated.*

Key Influenza Resources:

- **CDC Influenza Website:** This website contains the latest influenza information for health professionals and the general public, including links to weekly surveillance reports, press releases and educational materials. Please visit <http://www.cdc.gov/flu>. In addition, this website links to other important CDC influenza resources including the flu gallery, www.cdc.gov/flu/gallery (contains patient and provider educational materials), the influenza vaccine bulletins, http://www.cdc.gov/flu/professionals/flu_bulletin.htm (provide updates on the current vaccine supply situation, and a patient self screening form http://www.cdc.gov/flu/professionals/pdf/early_screening_form.pdf (helps patients to determine whether or not they are in the priority group for inactivated influenza vaccine).
- **Montana Immunization Program:** 1-406-444- 5580, Emergency/After Hours: 1-406-444-0273.
- **CDC INFO Hot Line:** Staff at 1-800-CDC-INFO can help both health professionals and the general public find answers to specific questions they may have about influenza or other public health issues. This service is available in English and Spanish 24 hours a day, seven days a week.

- **Influenza VIS:** In July 2005, Influenza vaccine was added to the National Vaccine Injury Compensation Program. CDC strongly urges the use of interim Vaccine Information Statements (VIS). When the final VISs are available, most likely in the next month, their use will be required. To obtain copies, please visit: <http://www.cdc.gov/nip/publications/VIS/default.htm#flu>.

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A LOVE STORY

**I SHALL SEEK AND FIND YOU.
I SHALL TAKE YOU TO BED AND HAVE
MY WAY WITH YOU. I WILL MAKE
YOU ACHE, SHAKE AND SWEAT UNTIL
YOU MOAN AND GROAN.**

**I WILL MAKE YOU BEG FOR MERCY...
BEG FOR ME TO STOP.**

**I WILL EXHAUST YOU TO THE POINT
THAT YOU WILL
BE RELIEVED
WHEN I'M
FINISHED WITH
YOU. AND YOU
WILL BE WEAK
FOR DAYS.**



**ALL MY LOVE,
THE FLU**

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Centers for Medicare and Medicaid Services (CMS) website and hotline:

The hotline and website provide information for health professionals about billing procedures, payment rates, and procedural issues as well as links to many other helpful sites. Please visit <http://www.cms.hhs.gov/preventiveservices/2.asp>. CMS also offers Medicare beneficiaries information and answers to their questions about vaccination, particularly about Medicare coverage. Beneficiaries should call 1-800-Medicare or visit: <http://www.medicare.gov/health/flu.asp>.

INFANTS & CHILDRENS –



Do My Kids Need a Flu Shot?

Many parents don't know influenza is a serious disease. Influenza, also known as the "flu," can cause severe health problems and lead to hospitalization. In fact, children aged 6-23 months have as high a chance of being sent to the hospital with influenza as people 65 years and older. Also, influenza and pneumonia combined is a leading cause of death in children.

- Making sure your child gets an influenza vaccination every year is the best way to protect against the flu. If your child is 6 months to 9 years of age and has never gotten an influenza vaccine before, he/she will need two doses one month apart.
- Healthy children, aged ≥ 5 years may receive the new influenza, nasal-mist, vaccine – "Flumist".

The nation's top health officials recommend that certain groups of children get vaccinated against influenza every year beginning in October because they have an increased chance of coming down with problems related to influenza compared to other groups of children. Health officials call these groups "high-risk," and they include:

- Children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma.
- Children who have required regular medical follow up or hospitalization during the preceding year because of chronic metabolic diseases, including diabetes, renal dysfunction, and immune suppression disorders, and other conditions.
- Children who have any condition that can compromise respiratory function or handling of respiratory secretions that could increase the risk for aspiration (i.e., spinal cord injuries, seizure disorders, etc.)
- Children aged 6 months - 18 years who

are receiving long-term aspirin therapy

- Children aged 6-23 months
- All children who are household contacts of children aged 0-23 months of age.

If your child cannot come in until December or later, the influenza vaccine can still help protect from the virus in most years.

PCV7 Vaccine in Young Children Reduces Disease in Children/Adults:

Streptococcus pneumoniae (pneumococcus) is a leading cause of pneumonia and meningitis in the United States and disproportionately affects young children and the elderly. In 2000, a 7-valent pneumococcal conjugate vaccine (PCV7) was licensed in the United States for routine use in children aged <5 years. Surveillance data from 2001 and 2002 indicated substantial declines in invasive pneumococcal disease (IPD) in children and adults compared with prevaccine years. To view the article published in a recent edition of CDC's Morbidity and Mortality Weekly Report (MMWR), please visit

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5436a1.htm>.

Immunization Registries Help Children Avoid Extra Shots:

In Louisiana, Mississippi, and Alabama, many people who had to evacuate lost not only homes and possessions but also personal records such as their children's shot records. Whether some children are up-to-date on their shots or need to be vaccinated is being answered through existing immunization information systems. In Louisiana alone, CDC estimates that more than 8,300 queries were made to the Louisiana Immunization Network for Kids Statewide (LINKS) concerning evacuated children. Although special provisions are being made to accept students without proof of immunization into their new schools, having an immunization record provides extra assurance that no delays will occur, and no immunizations will be repeated unnecessarily.

ADOLESCENTS -

Importance of Adolescent Vaccinations



Healthy People 2010 have set a goal of 90 percent coverage of adolescents aged 13 to 15 years for all universally recommended vaccines. In 2002 the data (based solely on parent recall) showed that hepatitis B had an immunization rate of 78%, Varicella was 69%, Td was 91% and MMR was at 92%.

Low immunization rates in adolescents may have a wide array of implications. Out breaks of vaccine preventable disease (remember the measles out break in the 1990s?), establishment of reservoirs of disease in adolescents that can affect others, including high risk infants, the elderly and others with underlying medical conditions.

Of the 846 measles cases reported in the US between 1996 and 1999, 22% occurred among people 15-24 years old. Worldwide there are 30 million cases of measles reported each year.

The main objective of rubella vaccination program is the prevention of congenital rubella syndrome (CRS). While overall the rubella incidence is downward, there is an increase in two notable groups. Rates in people aged 15 to 44 years have been on the rise since the mid-1990s. From 1997 to 1999, 83 percent of CRS infants were born to Hispanic mothers.

Adolescents are more likely than children to develop severe complications from chickenpox and are almost three times more likely to die from this disease.

Adolescence is a complex time in everyone's life. It is a time of extreme growth and change during which teens strive to gain their independence. With their sense of invincibility teens are more likely to engage in risky behaviors and disease prevention through vaccination is not an important issue in a teen's life. Most teenagers no longer go to the "baby doctor" (the most effective vaccinators) moving on to other types of providers or none at all.

Since adolescents do not have "well visits", it is important that providers assess the immunization status at every adolescent visit and administer vaccines as appropriate.

The ultimate burden of adolescent immunization lies with the parents and healthcare providers. It is equally important that adolescents become more knowledgeable of diseases and the vaccines available to prevent those diseases.

Adolescent immunization is a growing field with many new vaccines in the pipeline targeted for this age.



"Cervical Cancer Vaccine Is Successful in Study" Wall Street Journal (10/07/05) Chase, Marilyn

In phase III clinical studies, an experimental vaccine against human papillomavirus (HPV) developed by Merck has proven successful in preventing nearly 100 percent of invasive pre-cancers and non-invasive cervical cancers in women. The vaccine targets four types of HPV, a sexually transmitted virus that can cause cervical cancer. Merck tested its experimental vaccine, called Gardasil, on 12,000 women in the United States and a dozen other countries. "To have a vaccine that's essentially 100 percent effective against lesions related to HPV that are causally related to cervical cancer is a very impressive study," says Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, of the recent test results. Merck is planning to seek U.S. Food and Drug Administration approval for the vaccine later this year. Meanwhile, GlaxoSmithKline is working on a rival vaccine that the company says targets more viruses than Gardasil.

ADULTS –



**Don't Forget!!!
Pregnant women need
their "flu" shots - as
they become pregnant -
during flu season!!!**

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Coming Soon to a Local Nursing

Home Near You: Its that time of year once again, the "self reported" nursing home survey has gone out to all Long Term Care Facilities. Please remind your county LTCF to participate in the survey. The survey is designed to help LTCF increase the immunizations of both residents and staff.

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New Rule: Nursing Homes Must Offer

Influenza/ Pnumococcal Vaccines: A final rule has been issued by the Centers for Medicare and Medicaid Services (CMS) to increase immunization rates in Medicare and Medicaid participating long term care (LTC) facilities. The rule requires nursing homes to offer each resident immunization against influenza annually, as well as lifetime immunization against pneumococcal disease. Measurement of vaccination levels will occur by state survey and certification staff, and will be available on a quarterly basis beginning in 2006. Grantees are encouraged to work with their nursing home industry and CMS Quality Improvement Organization, where feasible, to assist in implementation of this rule. The final rule, as published in the Federal Register, can be found at: <http://www.cms.hhs.gov/providerupdate/regs/cms3198F.pdf>

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Increase in Nursing Home Coverage of Pneumococcal Vaccinations:

From 1995 to 1999, the percentage of nursing home residents aged >65 years who received 23-valent pneumococcal polysaccharide vaccine (PPV23) increased by 58.5%. This increase might be attributable, in part, to a 36% increase in the number of residents living in nursing

homes with pneumococcal immunization programs. The Advisory Committee on Immunization Practices (ACIP) continues to recommend PPV23 vaccination for all persons aged >65 years and all residents of nursing homes and other long-term-care facilities. To view the article published in a recent edition of CDC's Morbidity and Mortality Weekly Report (MMWR), please visit: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5436a5.htm>.

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New Adult Immunization Schedule:

The Advisory Committee on Immunization Practices (ACIP) annually reviews the recommended Adult Immunization Schedule to ensure that the schedule reflects current recommendations for the use of licensed vaccines. In June 2005, ACIP approved the Adult Immunization Schedule for October 2005--September 2006. This schedule has also been approved by the American Academy of Family Physicians and the American College of Obstetricians and Gynecologists. The new 2005--2006 schedule contains important changes. Please see the Morbidity and Mortality Weekly Report (MMWR) at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5440-Immunizational.htm> to view a complete list of the changes. The Adult Immunization Schedule is available in English and Spanish at: <http://www.cdc.gov/nip/recs/adult-schedule.htm>. See insert in this newsletter.



Remember: Colder Is Not Always Better.

The recommended temperatures for vaccine refrigerators range from 2-8° C or 35-46° F. During site visits this year, Health Services Specialists have found many temperatures below 2° C and 35°F. Some were close to freezing. If you keep your temperatures closer to the mid-range (4-5 °C, 39-42°F), it is less likely temperature fluctuations will inactivate your vaccine.

Other Immunization News

"Minnesota, USA" listed with 3rd World Countries on WHO's Website for Global Eradication of Polio.

Nigeria,	550 confirmed cases – 37% of cases
India,	45 confirmed cases
Pakistan,	19 confirmed cases
Afghanistan,	4 confirmed cases
Egypt,	1 confirmed case in January
Niger,	6 confirmed
Indonesia,	315 confirmed cases – 22% of cases
Somalia,	42 confirmed cases,
Ethiopia,	17 confirmed cases
Angola,	9 confirmed cases
Yemen,	473 confirmed cases – 32% of cases
Minnesota, USA,	5 children.

In September, the Minnesota Department of Health (MDH) identified type-1 poliovirus in stool samples of an unvaccinated, immuno-compromised 7-month old infant. Molecular testing (PCR) by the MDH laboratory identified this type 1 poliovirus strain as vaccine-derived; that is, a strain initially in live attenuated oral polio vaccine (OPV). The MDH laboratory and CDC believe this strain has been replicating for 1 to 2 years, and over time, has mutated and reverted to a strain that is more like wild poliovirus in terms of transmissibility and risk of paralytic disease. As OPV has not been used in the United States or Canada since 2000, the source of this strain may be a person who received OPV in another country. Poliovirus has since been isolated also in stool samples of four close contacts. None of the five children have displayed any symptoms of polio-paralysis.

MDH continues investigations to: 1) identify the virus source, and whether there is evidence of virus circulating in the community and/or possible nosocomial transmission; and 2) to vaccinate healthcare workers and potentially exposed community members who are unvaccinated or incompletely vaccinated against polio. Other persons could contract poliovirus from this infant through contact with stool or oral secretions. Widespread transmission in a vaccinated community is unlikely because fully vaccinated individuals are not at risk of disease from this or other polioviruses.

CDC recommends State and local health departments assess polio immunization coverage in their communities and provide

opportunities for unvaccinated persons to receive inactivated poliovirus vaccine (IPV). Frequently asked questions about polio and the vaccine-derived polio virus are available on CDC's website at:

<http://www.cdc.gov/nip/diseases/polio/faqs.htm>



Registry Tips for Timesaving Data Entry and Searching

► Use as few data elements for client search as possible. The more items you enter, the more you have to match.

► Birth date search is best, because it is the least likely to contain an error than the client's entire first and last name. This is especially important for infants who may be in the system with the first name of "baby boy" or "twin A". If you search with the first name for these children you will not find the record.

► If a person ever uses a formal first name, always enter the formal version of the name. Consistency pays off. For instance, if Robert sometimes goes by Bob, still use Robert in the computer record. Better yet, if you use a "birth date-only" search, you will still find the client.

► If you want to narrow the birth date search, use birth date and the first several letters of the last name. That way if there are any typos in the last name in the record, you will still see the record.

► Always use fields as intended. For instance, always put middle names or initials in the middle name field, do not include them in the first name field.

► Establish consistent ways within your office to record different last name types. For instance, if a child's last name is hyphenated, always use a hyphen. If the child's last name is two words, always use one space between the words. If the child's last name contains an apostrophe, such as O'Neil, agree to either use or not to use apostrophes.

**The CDC, National
Immunization Program:
“Epidemiology &
Prevention of Vaccine
Preventable Diseases”
series schedule - is as
follows:**



February 9, 2006

*Principals of vaccination, general
recommendations, vaccine storage,
handling and administration.*

February 16, 2006

*Pertussis, pneumococcal disease in
childhood, polio and Hib*

February 23, 2006

*Measles, rubella, mumps, varicella,
and meningococcal disease*

March 2, 2006

*Hepatitis B, hepatitis A, influenza and
pneumococcal disease (adult).*

**All sessions: 11:00a.m. - 2:30 p.m. For more
information go to:**

**www.phppo.cdc.gov/PHTN/epv06, or contact
Beth Cottingham at 444-2969.**

Hepatitis A News

Both the pediatric hepatitis A vaccines,
GlaxoSmithKline’s HAVRIX® and Merck’s
VAQTA®, are now licensed for use after 12
months. Updated prescribing information can be
found at the manufacturer’s website or at the FDA
website. www.fda.gov/cber

At their last meeting, the Advisory Committee on
Immunization Practices (ACIP) recommended that
all children should receive hepatitis A vaccine at 1
year of age (i.e., 12-23 months of age). This effort
should not replace efforts to vaccinate children with
other routine vaccines. Communities with existing
hepatitis A vaccination programs for children aged
2-18 years are encouraged to continue these
programs. Children who are not vaccinated by 2
years of age can be vaccinated at later visits and do
not need to be called back specially for hepatitis A
vaccine.

Pediatric hepatitis A vaccine consists of a two-dose
series with the first dose on or after the first birthday
and the second dose at least 6 months later.
Remember these are inactivated vaccines, and can
be used in combination with any other vaccines.

**MMWR, Dec. 9, 2005, Vol 54, No. RR-
14. 2005 CDC Guidelines,**

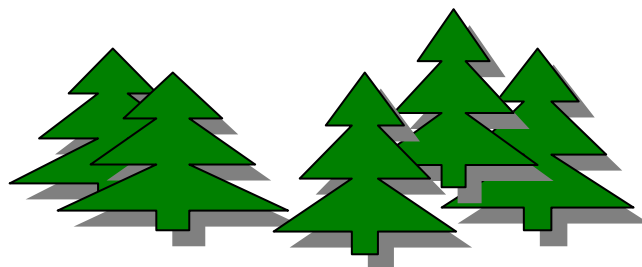
**“Recommended Antimicrobial Agents
for Treatment and Post Exposure
Prophylaxis of Pertussis”**

Pertussis, an acute bacterial infection of the
respiratory tract caused by *Bordetella pertussis*, is
the only disease, for which universal childhood
vaccination is recommended, that continues to
increase in the number of reported cases in the
United States. Among the possible reasons for the
increase include increased awareness and improved
recognition by clinicians, greater use and access to
laboratory diagnostics, and increased surveillance.
However, some of the increase might constitute a
real increase in cases.

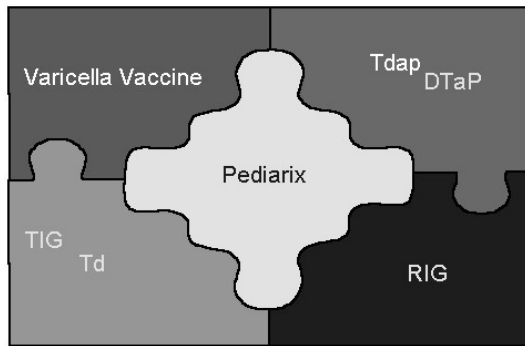
Erythromycin has been the antibiotic of choice for
the treatment or post-exposure prophylaxis of
pertussis. As we know, erythromycin has been
associated with side effects that often result in poor
adherence to the treatment regimen.

During the last decade, studies have demonstrated
the effectiveness of other macrolide agents. CDC
reviewed these studies and as a result of this review,
guidelines have been developed to broaden the
spectrum of antibiotics available for treatment of
pertussis. This report presents the updated
guidelines. The guidelines may be found at:
[http://www.cdc.gov/mmwr/preview/
mmwrhtml/rr5414a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5414a1.htm)

With increased treatment compliance, using
alternate therapies, we hope to decrease the disease
burden of Pertussis disease in Montana. We
encourage you to use this document as a supplement
to the Pertussis Outbreak Guidelines.



IMMUNITY PUZZLERS



Situation 1: A 15 year old arrives at a clinic for hepatitis A vaccine. The clinic finds it does not have the pediatric formulation on hand but does find an adult dose of Havrix 1440 EL.U./mL. 0.5 mL of the 1440 is drawn up with the assumption that this will equal the pediatric equivalent of 720 EL.U./ mL and administered.

Question: Is this practice permissible? What is the consequence?

Answer: This constitutes off label use and, as such, is not permissible. The consequence hinges on the fact that *Havrix is a suspension, as opposed to a solution*. Attempting to obtain a 720 EL.U. dose by withdrawing exactly 0.5 ml from the adult dosage may not be successful due to the vaccine's formulation as a particulate suspension.

Situation 2: A dialysis patient, who is a daycare provider, needs to have an MMR and would also like to receive the Hepatitis B series.

Question: Being a dialysis patient, are there special considerations for immunizing her with MMR and Hepatitis B?

Answer: Dialysis does not equate with a person being immunosuppressed. She can receive the MMR and will respond to the replication of attenuated viruses. *However, dialysis patients typically respond poorly to Hepatitis B vaccine* and she would need to work with her physician on this one.

Situation 3: A women in the first trimester of pregnancy presents at a clinic and upon consultation she is found to have received measles and rubella vaccine but not mumps. She relates never having a history of the disease as well.

Question: What course of action may be taken?

Answer: The chapter on mumps from G. Mandell's "Principals & Practice of Infectious Diseases", 6th edition states that susceptible pregnant women exposed to mumps have an increased risk of fetal loss if infected in the first trimester. A variety of congenital malformations have been described with mumps, but none have been statistically proven to be associated with infection. Immune globulin specific to mumps is no longer available, and had not been proven to be effective in preventing infection or complications. The upshot is that this woman (who cannot be vaccinated with live virus vaccine while pregnant) must avoid persons with mumps. Fortunately, mumps is rare in the U.S. thanks to MMR and the principals of community (herd) immunity.

Situation 4: I have never been immunized with any variation of DTaP. I am also an 18-year-old and my wife is pregnant. I am requesting a 3-dose series of Tdap. Will you do that for me?

Question: Should you?

Answer: No, Tdap is licensed for only 1-dose in a 3-dose series.



Stop in and exercise your brain!

"The Challenge" is presented for a little fun and we encourage you to discuss "The Challenge" with your peers and e-mail an answer to: thoran@mt.gov or fax your answer to the Immunization Program at 444-2920 to Tim Horan or, mail to: The Challenge, Immunization Program, Cogswell Building, P.O. Box 202951, Helena, MT 59620-2951

Winners will be acknowledged with Kudos in the next newsletter, and your names will be entered into a drawing for a T-shirt.

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Talk about this quarterly Newsletter - Challenge and Stretch Your Mind!

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The Challenge - Last News Letter (Fall 2005, Vol. 11, No. 4)

Question: On a beautiful spring day you come home to find your teenaged son and daughter arguing. This time they are arguing about, of all things, their healthy 65-year-old grandmother's (PPV23) first pneumococcal vaccination (Although they were, in fact, supposed to be raking the lawn). Your son contends that grandma needs a booster dose of PPV23, at least once, after 5-years to boost her immunity but your daughter says, "no way, and I can prove it!" your son challenges her to do so. Can she?

Answer: Yes, she can by referring to the January 2005, 8th Edition, second printing of Epidemiology & Prevention of Vaccine – Preventable Diseases (The Pink Book), page 241, we can quote: Routine revaccination of *immunocompetent* persons is not recommended...Persons aged 65 years and older should be administered a second dose of pneumococcal vaccine if they received the first dose 5 or more years previously, *and were less than 65 years of age at the time of the first dose.*

The science behind the answer is:

polysaccharides (PPV23, pneumococcal vaccine is polysaccharide) bypass T-cells that are responsible for the development of immune-memory cells. Memory cells are in fact the

physical counterpart of the booster response. No immune memory cells, no booster. No booster, no benefit derived by revaccination. Smart girl that daughter!

And speaking of smart: Much Kudos for the correct answer goes out to: **Karen Dwyer** of Sanders County Health Department for the correct answer.

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New Challenge

New Question: It's a beautiful fall evening. You have settled comfortably into your favorite recliner and have eagerly opened to the first page of Richard Preston's "The Cobra Event": a heart-stopping story of a secret counter – bioterrorist operation... You almost have the first paragraph read when your daughter announces that she needs you to drive her across town to baby-sit for some friends whose 10-month-old daughter has chickenpox. "They know I'm immune Dad because you had me vaccinated against varicella several years ago. The grandmother was going to stay with her tonight but she is worried that if she touches the granddaughter she will get shingles!" As you reluctantly put down the chilling thriller and walk out to the car you began to explain to your daughter that the grandmother's fears of contracting shingles from the granddaughter are unfounded. What do you say?

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UPCOMING EVENTS:

- **"Every Child By Two" Immunization Meeting**
(ALL IMMUNIZATION PARTNERS WELCOME)

January 20, 2006, 12 Noon to 2:00 p.m.

- Regional Workshops

January - March - Watch for dates and registration information.

- Teleconference: Epidemiology & Prevention of Vaccine Preventable Diseases.

A four session series - presented by the National Immunization Program, CDC via satellite & webcast. February 9, 16, 23, March 2, 2006. All sessions from 11:00 a.m. to 2:30 p.m.

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THE READING WELL **TO ORDER MORE BOOKS -**

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